



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,326	09/18/2003	Earl O. Bergersen	BER-P-03-052	6248
29013 7590 04/25/2008 PATENTS+TMS, P.C. 2849 W. ARMITAGE AVE. CHICAGO, IL 60647				
EXAMINER				
SINGH, SUNIL K				
ART UNIT		PAPER NUMBER		
3732				
MAIL DATE		DELIVERY MODE		
04/25/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/665,326

Applicant(s)

BERGERSEN, EARL O.

Examiner

Sunil K. Singh

Art Unit

3732

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-127 is/are pending in the application.
- 4a) Of the above claim(s) 65-74, 120 and 122 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13, 21-29, 40-64, 78-86, 92-117, 121 and 124-127 is/are allowed.
- 6) ☒ Claim(s) 14, 16, 17, 19, 20, 30-39, 75, 87-91, 118, 119 and 123 is/are rejected.
- 7) ☒ Claim(s) 15, 18 and 76 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Newly amended claims 65-74,120 and 122 are now directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The newly amended claims are now directed to a method of using the apparatus while the original claims are directed to an apparatus. According to MPEP § 806.05(h), the inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. In the instant case, the apparatus can be used in a materially different process such as a mouth guard or a teaching aide.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 65-74,120 and 122 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3732

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14,17,19,20,77,87-90,118 and 119 are rejected under 35

U.S.C. 102(b) as being anticipated by Bergersen (5,876,199). Bergersen shows a dental appliance comprising a generally U-shaped upper base 214 which contacts the upper teeth of the user when the upper base is worn; a generally U-shaped lower base 216 adjacent to the upper base and having a socket therein to contact at least one tooth, wherein the lower base contacts lower teeth of the user when the lower base is worn; wherein the base has a thickness defined between a first end and a second end, a cavity/concave portion 60 formed within the upper base and the lower base wherein the cavity/concave portion is sized to receive a tongue of the user wherein the cavity/concave portion moves the tongue to an elevated position with respect to the lower arch of the user wherein the elevated position of the tongue expands the upper arch of the user; and a pivot in the hinge 212 connecting the upper base and the lower base. As to claim 90, note that the appliance has lingual tabs 46. Regarding claim 119, the occlusal surfaces are flat and are sized to fit many different sizes of teeth and mouths (column 5, lines 3-9).

Claim 119 is rejected under 35 U.S.C. 102(b) as being anticipated by Bergersen (6,129,084). Bergersen shows a dental appliance comprising a U-shaped upper base with a flat occlusal surface, a U-shaped lower base with a flat occlusal surface. The bases are sized to fit users of various types of dentition

Art Unit: 3732

(column 3, lines 31-37) and are hinged together via hinge 34 which could be removed with the proper tools.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (4,784,605) in view of Kussick (5,779,470). Bergersen '605 does not include a reference mark to indicate the proper position for the appliance. Kussick shows a dental appliance having a reference mark to indicate the proper position for the appliance in the mouth (column 5, lines 51-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the appliance of Bergersen with a reference mark, as taught by Kussick, in order to aid in proper placement of the appliance in the mouth.

Claims 30, 33-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Bergersen (5,876,199) in view of Bergersen (4,784,605). Bergersen '199 does not include a spike formed on the lingual surface of the lower base or the upper base. Bergersen '605 shows a dental appliance comprising an upper base, a lower base, and a spike 26 formed on the lower base to prevent the tongue from moving toward the lower teeth. It would

Art Unit: 3732

have been obvious to one of ordinary skill in the art at the time the invention was made to provide the upper or lower base of Bergersen '199 with a spike in the lingual surface as taught by Bergersen '605, to encourage proper tongue positioning to overcome tongue thrust problems. As to claim 35, Bergersen '199 shows that the upper base and the lower base have a rib (the portions between tooth sockets) to contact the upper teeth to adjust the tooth is the correct portion. Regarding claims 33 and 34, note that the rear most socket of Bergersen '199 is sized to receive at least two teeth.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Bergersen (4,784,605) as applied to claim 30 above, and further in view of Bourke (5,536,168). The appliance of Bergersen '199 and '605 does not have a roughened surface. Bourke shows a dental appliance wherein the bases have roughened surface (by virtue of prongs 18) in order to facilitate movement of the teeth. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bases of Bergersen '535 and '605 with roughened surfaces, as taught by Bourke, to facilitate movement of the teeth.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Bergersen (4,784,605) as applied to claim 30 above, and further in view of Bergersen (6,129,084). The combination of Bergersen '199 and '605 does not include lingual tabs. Bergersen '084 shows a dental appliance comprising upper and lower bases and lingual tabs 28b, 28c extending horizontally from the rear of the lower base. It would have been

obvious to one of ordinary skill in the art at the time the invention was made to provide the appliance of Bergersen '199 and '605 with lingual tabs extending horizontally from the rear of the lower base, in order to help hold the appliance against the lingual surface of the teeth.

Claim 91 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (5,876,199) in view of Bergersen (4,784,605). The upper and lower bases of Bergersen '199 do not include ribs formed therein. Bergersen '605 shows a dental appliance comprising upper and lower bases. The bases have ribs (area of the bases that are located between the teeth) projecting toward the teeth. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bases of Bergersen '199 with ribs, as taught by Bergersen '605, in order to move the teeth into the correct positions.

Claim 123 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (4,898,535) in view of Bergersen (5,645,420). Bergersen '535 shows a dental appliance comprising an upper base, a lower base, and a hinge 44. The hinge may be made of metal (column 3, lines 30-31) which is inherently harder than the material that forms the bases. Bergersen does not teach that the bases are formed of a moisture resistant material. Bergersen '420 shows a dental appliance and discloses that it is formed of a moisture absorbent material (column 10, lines 62-66). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the appliance of Bergersen '535 of a moisture absorbent material, as taught by Bergersen '420, to enable the patient to apply fluoride or other liquid to the teeth.

Allowable Subject Matter

Claims 1-13,21-29,40-64,78-86,92-117, 121 and 124-127 are allowed.

Claims 15,18 and 76 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that none of the references teach a hinge/connecting means that may be removed from and re-connected to the upper base and the lower base to reversibly detach and re-attach the upper base. However, the applicant states this limitation in the claims as a hinge/connection means that **may be** removed or re-connected meaning that the prior art's hinge **does not have to be** removed or re-connected. Rather, the prior arts only have to show a hinge with the **capability** of being removed or re-connected. Since the prior art's references disclose a hinge that is **capable** of being removed and re-connected, the examiner believes that the references therefore reads on the limitation as stated in the claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

Art Unit: 3732

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil K. Singh whose telephone number is (571) 272-3460. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris L. Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

04/21/2008

/Sunil K Singh/
Examiner
Art Unit 3732

/Cris L. Rodriguez/
Supervisory Patent Examiner, Art Unit 3732